# Greater Downtown Dayton Plan

City of Dayton, Ohio

Platinum Cycling Friendly Plan

DRAFT

Active Lifestyle and River Corridor Committee

# **Table of Contents**

Introduction	1
A. Vision Statement	2
B Goals	2
Why Cycling	3
A. Quality of Life	3
B. Health Promotion	4
C. Environmental Sustainability	5
D. Economic Benefits	5
Themes	7
A. Transportation	7
B. Safe Routes to School	8
C. Complete Streets	
D. Recreational Opportunities	9
E. Inter- and Intra- Governmental Cooperation	
F. Partnerships with the Private Sector	10
G. Innovation	10
Context and Analysis	
A. League of American Bicyclists Bicycle Friendly Community Program	
B. Bicycle Mode Share	
C. Crashes and Fatalities	
D. Funding	
E. Status of Current Plans and Programs in Dayton	
Timeline Index	
Recommendations	
Infrastructure	
Enforcement	
Land Use and Planning	42
Education, Encouragement and	
Outreach	48
Assessment and	
Review	
Conclusions	67

# Greater Downtown Dayton Plan Cycling Plan

## Strategic Overview

Bike friendly initiatives are being embraced around the country as a strategy to increase urban vibrancy and improve quality of life and grow the creative workforce. Cycling puts people on the street, changes their perspective and how they interface with the community. Of course, we know that people visible to others attract people, so cycling's ability to increase the number of people on the street is a key ingredient in creating a interesting and varied street culture that can be leveraged for economic and creative efforts. Finally, a region's propensity to be bike friendly is a creative class indicator. A quick look at the top cycling cities in the nation reveals that the mobility and culture cycling engenders can transform cities into destinations for both tourists and those looking for great places to live and work.

A successfully implemented bike friendly initiative described by this Greater Downtown Dayton Cycling Plan can change how the region's citizens travel in the downtown core and could act as the catalytic initiative that the area needs to become a Midwest cycling and ultimately an outdoor recreation destination and people friendly community.

The Greater Downtown Dayton Plan should leverage the recently adopted Miami Valley Regional Planning Commission's (MVRPC) Comprehensive Local Regional Bikeways Plan (CLRBP) in conjunction with the process developed by the League of American Bicyclists' (LAM) Bicycle Community Program through the City of Dayton's newly formed Bike Task Force to focus the region's bike friendly efforts on the core downtown in order to quickly expand and implement a cycling friendly initiative.

The effort should set its sites initially on Bronze Bike Friendly Certification among other tactics and with the goal of ultimately reaching Platinum Bike Friendly status, not to simply gain the certification, but to use the process to transform the Dayton core into a vibrant people friendly core.

## **Current Position**

The Dayton region has developed an impressive set of cycling infrastructure and amenities over last 35 years. This effort has engendered the development of a large, but somewhat disjointed cycling community and retail sector that could be leveraged for plan support ( Currently there are 18 bike shops in the Greater Dayton MSA...none in the City of Dayton proper).

Recently many related but somewhat uncoordinated cycling centric initiatives have been started or completed. Much of the work needed for Dayton to reach its

full cycling potential is in place. The challenge is to organize, one coordinated effort that can be funded and implemented in a phased manner to leverage existing elements. Following are some of the key initiatives underway:

- Opening of MetroParks Mountain Bike Area Sept 2007.
- RiverScape Phase III Bike Hub Development
- UD Bike Co-op project
- City of Dayton Bicycling Task Force
- Passage of Comprehensive Local Regional Bikeways Plan
- Bike Friendly Community Initiative
- SE Corridor Task Force
- Comprehensive Local Regional Bikeways Implementation Plan Steering Committee
- Regional Recreation Trail Way finding System
- Near completion of local segments of the Great Miami River and Mad River Recreation Trails
- Regional Cycling Web and Promotions project
- The Miami Valley Cycling Summit set for August 14
- Downtown Dayton Cycling Plan

## Political Will and the Community

Successful cycling initiatives around the country have several key elements in common:

- Public-private partnerships. The majority of successful cycling communities combine visionary goal setting with strong political, governmental, grassroots organizations in their effort to become cycling friendly.
- 2. Existence of a charismatic private or political figure or group that challenges or motivates the community to become cycling friendly
- 3. A somewhat centralized dedicated cycling-focused coordination via an individual or organization

Through work in planning the upcoming Miami Valley Cycling Summit discussions with cycling leaders from current Bike Friendly Communities tells us that in many ways the idea of a cycling friendly community has been normalized in Dayton to a much greater extent than it was for others at the beginning of their effort. As much of the effort has been driven by local government, as opposed to citizen-based grass roots effort the idea of cycling has become mainstream.

The ability to bring community leadership together in an established commonly understood goal will be key in quick achievement of cycling goals. The upcoming Miami Valley Cycling Summit will be the next step for the community to come together and collaborate on making Dayton and the region truly bike friendly.

### Stated Goals

- 1. Create a pedestrian and cycling friendly environment in the Dayton Downtown Core that will significantly improve the quality of life of the City's residents and will increase cycling as a recreational activity and transportation alternative.
- 2. Implement a comprehensive Complete Streets program to improve street infrastructure to better accommodate cycling and pedestrian activity through traffic calming, street diets, bike lanes, sharrows, bike boulevards, and other access creating efforts.
- 3. Continue to connect to and expand Dayton's off-street trail network.
- 4. Dayton will promote a bicycling culture that supports experienced riders and brings new riders safely and comfortably into cycling.
- 5. Dayton educational institutions, businesses, health care providers, and government will actively support bicycling as a transportation choice.
- 6. Dayton will build social capital by encouraging bicycling as a social norm for all of Dayton's diverse population.
- Dayton will facilitate a mutual respect among drivers, bicyclists, and pedestrians by promoting education, acceptance, and consistent enforcement of traffic laws.
- 8. Dayton will collaborate with surrounding municipalities, Montgomery County, and colleges and universities to develop complementary bicycle transportation plans and a seamless network of bikeways in the Dayton area.
- 9. Dayton will take advantage of the unique resources in our area (UD, Sinclair Five Rivers Outdoors and other educational institutions, bicycle industry, other businesses and nonprofit organizations) to engage in public-private partnerships to develop innovative bicycle facilities, educational programs, outreach efforts, and funding mechanisms.
- 10. Dayton's bicycle plans will be incorporated into other city plans (such as transportation plans, land use plans, neighborhood plans, the Comprehensive Plan, etc.) to promote bicycle use as part of a multimodal, environmentally-friendly urban transportation network.
- 11. Dayton will create an on-going mechanism for cooperation and cross fertilization on bicycling issues across city department disciplines and regional agencies
- 12. Dayton will increase its bicycle mode share (the percent of the traveling public that uses a bicycle for transportation).
- 13. Create nearly ubiquitous on and off-street connectivity to the Bike and Pedestrian Friendly Zone (recommended in this report) Dayton Downtown Core and established arterial recreation trail network.
- 14. Implement a cycling sharing program that will further normalize cycling in the core and will act as a "last mile" extension of the existing transit network providing needed connectivity, mobility and mode shift.
- 15. Utilize cycling friendliness and amenities as one element of an effort to remake the image of Dayton Ohio as a bike friendly destination.
- 16. Improve connections to the regional trails in the downtown core.

17. Finally full Implementation of the recently adopted City of Dayton Complete Streets Plan as part of the larger Comprehensive regional/Local Bikeways Master Plan.

# Objective Overview

- a. City of Dayton achieve Platinum Level Bike Friendly Certification by 2020
  - i. City of Dayton achieve Bronze Level by 2010
  - ii. City of Dayton achieve Silver Level by 2012
  - iii. City of Dayton achieve Gold Level by 2015
- b. Leverage the implementation of the Greater Downtown Dayton plan as a catalyst for further regional action.
  - i. Achieve Bronze level Regional Bike Friendly certification by 2015 (e.g. Tucson area)
- c. Achieve 5% of population commuting by cycling by 2015
- d. Create a sustainable public-private cycling organization and initiative that will make Dayton a Midwestern cycling destination
  - i. Develop an image and marketing plan to raise Dayton image as a cycling center
  - ii. Develop a regional cycling web site to promote the region's cycling opportunities to the region and nation
- e. Implement a Safe Routes to School Program for schools in the plan zone
- f. Develop a sustainable multi-level integrated cycling education program housed in a downtown Bike Co-op

## **Initial Tactics**

- a. The LAB Bike Friendly Community Program should be used as a planning and assessment framework.
  - Assess and identify gaps in Bike Friendly requirement focusing on the Bike and Pedestrian Friendly Zone downtown as the initial effort.
    - 1. Make application to the LAB for the purposes of developing an assessment of cycling deficiencies in the core plan area.
  - b. Perform gap analysis and develop Core area action plan to resolve deficiencies
  - c. Identify gaps for City of Dayton beyond Core area plan and develop action to resolve
  - d. Implement city-wide plan to resolve deficiencies and apply for City of Dayton Bronze Certification status.
    - 1. Complete Streets
    - 2. Safe routes to School
    - 3. Education and Promotion

- e. Implement a bi-annual Cycling Summit to move the Bike Friendly initiative forward with grassroots support.
- f. Target and complete key indicator-level infrastructure
  - 1. Establish 3 public or private bike parking facilities in core for up to 50 bikes
  - 2. Implement the two-way downtown bike lane project
  - 3. Work with regional partners to complete the South East Corridor Trail within Dayton city limits by 2010
  - 4. Complete the Wolf Creek Recreation Trail in the City of Dayton
  - 5. Complete the Creekside extension along US 35 into the Huffman Neighborhood
  - 6. Identify key neighborhood connections into Core and identify bike boulevards to establish
  - 7. Add sharrows or bike lanes to 5 other core streets or connections to the core

# Organization

The City of Dayton Bike Task Force should be leveraged as the core of the effort to develop and implement a comprehensive Greater Downtown Dayton cycling plan within the context and stated cycling goals of the public-private Greater Downtown Dayton Plan initiative.

The City of a Dayton Bike Task Force has established a good initial assessment of the Bike Friendly Community program requirements as they apply to the Dayton area. Participation needs are currently being assessed by the existing Task Force members for additional task force participation needs from the community.

Task Force members from throughout the community should be selected for their dedication to improving the city and for their knowledge of various bicycling issues including health, engineering, education, city processes, industry and business, law enforcement, environmental sustainability, and transportation choice. In addition to community members, city staff from the Departments of Traffic Engineering, Engineering, Public Health, Parks and Recreation, Police, Planning, as well as regional partners Miami Conservancy District, Five Rivers MetroParks, MVRPC, and Miami Valley RTA. Input from the public should be sought along the way.

Successful cycling initiatives rely heavily on energetic grassroots participation to maintain the energy, enthusiasm and momentum of long-term cycling initiatives. This element is lacking in current cycling initiatives in the community and is a deficiency that needs to be addressed.

Recommendation: The City of Dayton Task Force and Dayton Downtown Planning Committee should work to develop a sustainable grassroots

organization with which it can work to gain public input and maintain initiative momentum. The potential exists to revive Bike Miami Valley for this purpose? The Cycling and Pedestrian Town Hall and the 2009 Miami Valley Cycling Summit scheduled for August 14 are the first steps in this effort.

Recommendation: In order for the Task force to be effective it is recommended that a dedicated, empowered individual be identified that can coordinate the planning and implementation of task force planning and recommendations.

# The Detailed Plan

# Why Cycling

#### A. Quality of Life

Daytonians enjoy and value a high quality of life. Better conditions for bicycling and walking have tangible and intangible benefits to the quality of life. In cities where people can regularly be seen out bicycling and walking, there is a palpable sense that these are safe and friendly places to live and visit. Bicyclists are an indicator of quality of life, the proverbial "canary in the coalmine." A contributing factor towards preserving and improving Dayton's quality of life is making the City even more friendly to bicycling.

#### **Insert Photo**

Bicycling can improve quality of life in many ways, including:

- Allowing individuals to integrate physical activity into their daily lives and/or commute, thereby enhancing time spent traveling to work, school, shopping, or exercise facilities.
- People on bikes perceive and interface differently that people encased in a car moving at 50 mph. This more visceral experience fostering a sense of community in both neighborhoods and workplaces through the intimate contact of bicyclists with their surroundings, thus helping to build Dayton's reserve of social capital.
- Reducing car traffic in neighborhoods, around schools and social centers.
- Reducing noise and air pollution in and around pedestrian centers.

#### B. Health Promotion

The City of Dayton performs poorly in many health surveys and studies. As a gateway activity and form of alternative transportation cycling may have the ability to help local residents build an active, healthier lifestyle. This plan will complement and further the activities and goals of other plans and organizations working to improve the health of Dayton residents. According to a July 2009 report issued by the Robert Wood Johnson Foundation, Ohio is the 10<sup>th</sup> fattest state in the USA.

There are several programs in operation that seek to address the increasing rates of obesity and increase in sedentary lifestyles. The health benefits of regular physical activity are far-reaching: reduced risk of coronary heart disease, stroke, and other diseases; lower health care costs; and improved quality of life for people of all ages. Improving health lessens the impact of the growing health care crisis and decreases the money individuals spend on prescription drugs and that is spent on emergency health care.

Physical activity need not be unduly strenuous for an individual to reap significant health benefits. Even small increases in light to moderate activity, equivalent to bicycling for about 30 minutes a day, produce measurable benefits among those who are least active.

One of the best ways to sustain a physical activity program is to incorporate it into a day-to-day routine. Bicycling for transportation and recreation fits well with these goals. Making bicycling a safer and easier choice for people also improves the health of the community.

#### Insert image

#### C. Environmental Sustainability

Motor vehicles create a substantial amount of air pollution. Although individual cars are much cleaner today than they once were, as total motor vehicle miles traveled continues to grow, overall air quality will deteriorate. Decreasing air and noise pollution around schools and neighborhoods will improve the environment for citizens.

Reducing CO2 emissions should be an important priority for Dayton for the public's health. Cars and trucks burn millions of barrels of oil, a non-renewable energy source, every day. America's reliance on oil and the emissions of greenhouse gases are factors troubling many Daytonians. The bicycle offers a sustainable and efficient alternative to motor vehicle travel.

Fewer raw materials go into the making of bicycles and bicycle infrastructure than of automobiles and roadways, thus reducing the potential landfill waste. In addition, Dayton is home to several emerging efforts that recycle, refurbish, and reuse bicycles, reducing the number of bikes that end up in a landfill and putting cycling in the hands of those that can use them most. Name 2-3 of these efforts

#### D. Economic Benefits

When safe facilities are provided for pedestrians and bicyclists, more people are able to be productive, active members of society by using the transportation provided by bicycles. Bicycling and walking are affordable forms of transportation. Car ownership is expensive---bikes much less so

According to the 2000 US census, a substantial number of Dayton residents do not have access to a car for transportation making cycling accessible to all is an important economic and social justice issue. Insert Kate's data

By increasing bicycle riding, it may make it possible for some families to reduce the number of cars that they own. The more transportation costs are reduced, the more disposable income residents will have to improve their own lives.

In addition, the provision of bicycle facilities has actually been shown to increase property values. A 2002 National Association of Realtors (NAR) and National Association of Home Builders (NAHB) survey of 2000 homebuyers ranked a bikeway as "the second most important neighborhood amenity for homebuyers." Information cited by the National Park Services says that "property values are higher adjacent to paths or trails, that homeowners and real estate agents believe that trails have either positive or no adverse effects on property values, that parks and greenbelts may increase property tax revenues, or that developers or builders may benefit from the presence of trails."

Evidence of this trend is represented locally in The Ohio State study that found real property values increased near MetroParks and recreation trails.

Also, bicycling is a major tourism draw. Dayton can increasingly be a major destination for bicycling tourism, bringing millions of dollars in income to our area businesses. Events like Gear Fest and the Adventure Summit in Dayton point to the potential for recreation tourism dollars.

Employees who bicycle are healthier and more productive, losing less time to illness. Encouraging bicycling can have a positive return on investment much like many worksite wellness programs.

Finally, the Dayton region is home to several bicycle manufactures and sports 17 bicycle retailers. Improving bicycling conditions will increase the number of bicycle riders, and thus increase the direct and indirect positive economic impacts of the bicycling industry on the local economy.

## Themes

The Platinum Plan recommendations fall under the following themes:

#### A. Transportation Choice

Many of the trips that Dayton's residents make every day are short enough to be accomplished on a bicycle. The 2001 National Household Transportation Study (NHTS) found that approximately 44% of all trips in Dayton are less than 2 miles in length – which represents a 10-minute bike ride or a 30-minute walk. The same study found that 30% of trips were less than a mile. In Dayton, a bike ride from the southern suburb of Centerville to Downtown Dayton can take less than a half hour.

People are willing to try modes other than the automobile if they feel that they are safe and convenient. A 1995 Rodale Press survey found that Americans want the

opportunity to walk or bike instead of drive: 40% of U.S. adults say they would commute by bike if safe facilities were available.

#### Insert Image

Bicycling and walking can help reduce roadway congestion. Many streets and highways carry more traffic than they were designed to handle, resulting in gridlock, wasted time and energy, pollution, and driver frustration. Enabling the Dayton region to connect and use the already extensive trail network for commuting though a Complete Streets policy is an excellent example of leveraging an existing cycling investment. Bicycles require less space per traveler than automobiles. Roadway improvements to accommodate bicycles can also enhance safety for motorists.

For example, adding paved shoulders on two-lane roads has been shown to reduce the frequency of run-off-road, head-on, and sideswipe motor vehicle crashes.

#### B. Safe Routes to School

Walking or bicycling to school was once a part of everyday life. In 1969, about half of all students walked or bicycled to school, but today less than 15 percent of all school trips are made by walking or bicycling (Report No. 4, NPTS, FHWA, July 1972 and 2001 NHTS). There has been a subsequent adverse effect on traffic congestion and air quality around schools, as well as on pedestrian and bicycle safety. Children who lead sedentary lives are at risk for a variety of health problems such as obesity, diabetes, and cardiovascular disease ("Physical activity and the health of young people," U.S. Centers for Disease Control & Prevention, Fact Sheet, 2004). Ironically, traffic danger is regularly cited as a reason parents do not allow their children to bicycle or walk to school ("Barriers to Children Walking and Biking to School," CDC, 2005).

Over the last several years an international movement has developed called Safe Routes to School, which seeks to improve children's ability to bike or walk to school by improving engineering, enforcement, education, encouragement, and evaluation. Though Safe Routes to School is a program or a combination of programs and policies that can be implemented, Greater Dayton Planing Group it is a theme that should be considered whenever improvements for bicycling and walking are discussed or made. All of the components of Safe Routes to School are incorporated in this report, though they are not always directly identified as such.

#### Insert Image kids heading to school.

#### C. Complete Streets

A complete street is a street that works for all users: motorists, bus riders, bicyclists, and pedestrians, including people with disabilities. The goal of a complete streets policy is to create streets that are safe and convenient for all

users. This is an important concept and theme in the Greater Dayton Planing Group's recommendations, especially in the planning, policy, land use, and infrastructure recommendations.

Complete streets are not intended to be limited to a few designated corridors. Rather, a complete streets policy strives for diversity of use on almost every street, creating a variety of route choices and facility types for all users. The US Congress and the US Department of Transportation have passed legislation and policies that intend to encourage complete streets (also known as "routine accommodation"), but few states and cities follow them. Dayton is just now considering a complete streets, now is the time to be bold and implement a policythat will make Dayton a leader in the nation.

#### Insert: complete street Image

#### D. Recreational Opportunities

In addition to being a mode of transportation, bicycling is recreational. Its recreational opportunities range from the leisurely family ride, to long distance touring, to racing. By improving bicycling in Dayton, we can make Dayton a center for recreational activities, not only improving our citizens' health, but also attracting visitors and businesses to our community. Also, some individuals who begin bicycling for recreation later bicycle for transportation.

#### E Extending off street corridors and trails

Downtown Dayton's street grid was engineered to pass traffic efficiently when downtown was home to major automobile, tire, paint and printing operations. As such, the street infrastructure is is overly weighted to the accommodation of automobile traffic and not conducive to walking and cycling, decreasing the safety, security and ability for bikes and pedestrians traveling downtown. The downtown core streets provide a significant opportunity for creating off street biking where an underutilized multiple lane street once existed. Other tactics include shrinking street width, creating calmed intersections, bike boulevards and lanes that could make the core a cycling and pedestrian haven.

#### G. Partnerships with the Private Sector

In an era of dwindling public resources, public-private partnerships are becoming more important. Ohio, and Dayton in particular, is in the unique position of being an emerging outdoor recreation center with over 45 businesses in the outdoor recreation sector including several national manufactures.

Other local employers should be helped to understand the importance of a healthy community and the contribution that bicycling can make to a healthy community. Employees who bicycle are healthier and more productive, losing less time to illness. Encouraging bicycling can have a positive return on investment much like many worksite wellness programs. Dayton's social capital

relies on its citizens, and businesses are just a larger extension of our citizenship.

#### H. Innovation

The Greater Dayton Planing Group has made an effort to make recommendations that are

innovative and visionary, with the intent of assisting the City of Dayton toward becoming the best city to bicycle in America. To that end, many of the recommendations in this report may be a "stretch" from the current condition or practices. However, this report is meant to also be a list of "actionable" items, and not a laundry list of "pie in the sky" ideas. Actionable items are ideas which are reasonable, not cost prohibitive, and are likely to be implemented. The intent of this report is full implementation of all of the recommendations.

# **Context and Analysis**

A. League of American Bicyclists Bicycle Friendly Community Program The Bicycle Friendly Community Campaign is an awards program that recognizes municipalities that actively support bicycling. A Bicycle-Friendly Community provides safe accommodation for cycling and encourages its residents to bike for transportation and recreation. The League of American Bicyclists (LAB) administers the Bicycle Friendly Community Campaign. The two year awards range from Honorable Mention, to Bronze, Silver, Gold, and Platinum. In addition, many communities apply and receive no designation whatsoever. The application process involves a screening application (Part I) and a more in-depth application for those communities that qualify (Part II). A committee at LAB scores the Part II application. The process includes feedback from LAB members in the community that has applied.

#### B. Bicycle Mode Share

Bicycle mode share is the percent of transportation trips made by bicycle. The decennial US Census tracks mode share for the journey to work only. Bicycle mode share for trips other than the journey to work can be difficult to determine, and usually requires a scientific survey or study, often called a Household Travel or Transportation Survey.

These surveys are often undertaken by communities for the purpose of developing air quality models. Two of the most bicycle friendly communities in the world include Amsterdam and Copenhagen. Overall bicycle mode share for these cities hovers around the 30% mark. Copenhagen currently has a goal of a 40% bicycle mode share. As mentioned above, in the United States there is not good, consistent data on TOTAL bicycle trips by city, but a few of the cities with the highest bicycling commuting mode share are shown below.

- Davis, California-14.42%
- Boulder, Colorado-6.89%
- Santa Cruz, California-4.43%

Tucson, Arizona -2.21% Source: 2000 US Census The 2000 U.S. Census Journey to Work data indicates that Dayton has a .003?? bicycling mode share for employees over the age of 16. The Thunderhead Alliance, a national coalition of state and local bicycle and pedestrian advocacy organizations working to help organizations to grow and become more effective, is currently undertaking a national benchmarking project supported by the Centers for Disease Control, the Institute for Transportation Engineers, and Planet Bike to collect better data on bicycling, including bicycle trip mode share.

The MVRPC Bikeway Ssteering Committee is implementing its first regional trail count in July 2009.

#### b) Primary use of bicycle

In order to actually understand our performance gathering accurate data on bicycle use in Dayton on a regular basis would be very useful in efforts to improve bicycling conditions in the City. Among the recommendations of this report is a suggestion that a such study be undertaken and repeated at regular intervals.

#### C. Crashes and Fatalities

Need crash data from MVRPC and City.

#### D. Funding

Finding sufficient funding for any city program or project is an ongoing challenge. Reference Comp Plan... includes an extensive list of funding sources available for use with bicycle transportation projects.

The recommendations of this report fall into one of two categories: infrastructure or capital budget projects and programs or operating budget projects. If the City of Dayton wishes to advance bicycle/pedestrian projects in a timely manner, additional funding and staff resources will need to be allocated. New funding sources will need to be developed. These sources may include impact fees, special assessments, and the proposed Regional Transportation Authority sales tax funding. The Name strongly suggests that the City investigate the use of these funds and others to help implement the recommendations of this report. In the case of some infrastructure projects, but certainly with regards to program based projects, the City will need to commit a larger portion of local general obligation

funds in order to implement the recommendations of this report, as well as seek partnerships with the private sector and regional partners.

#### E. Status of Current Plans and Programs in Dayton

The region recently approved MVRPC'sComprehensive Local Regional Bikeway Plan 20 year master cycling plan.

This report is meant to a complement, and not replace that plan's recommendations. This plan is developed to act as an implementation device for the existing Bikeways plan.

MVRPC Comprehensive Local/Regional bikeways Plan Insert link

## Recommendations

This report contains an extensive list of recommendations. Each recommendation includes a concept or action, with details, responsible party, performance measure, timeline, and required resources. It was the committee's intent to provide enough information to make the recommendation clear, while leaving room for flexible implementation by the city. Where possible, estimates of cost have been included.

The committee has developed a draft timeline for implementation of the report's recommendations. While the timeline may evolve as each project is examined in detail, the committee felt that including a draft timeline was critical to the implementation of the report's recommendations.

Some efforts have been made by the committee to prioritize the recommendations. The Committee forwarded 20 recommendations to the Mayor as priorities for 2009 – 2010 planning. These 20 recommendations are denoted with the following icon  $\bigcirc$  in the report:

The plan stresses, however, that the prioritization of the recommendations was mainly completed with the regional plan and in order to provide leadership with first steps. The committee expects the City to implement ALL of its recommendations.

# Timeline Index

This plan is identifies 20 recommendations to the Mayor and The Cities Task force as priorities for 2009 - 2010 planning.

These 20 recommendations are denoted with the following icon

## Recommendations: Infrastructure

Adopt and implement a Complete Streets Resolution.

Details: Complete Streets are defined in the Themes section of this report. While paths are useful, especially for recreation, paths can practically be located safely in only certain areas.

certain areas. Streets must also be a component and will form the core of the bikeway system. The resolution should state that all new arterials, collectors and select commercial streets shall have bike lanes. Reconstruction of existing streets (such as East

Washington) will likewise be updated to meet Complete Street criteria. Place design and construction of bicycle facilities (street and path) at the same level as other modes.

Responsible Party: Task Force with input from Engineering, Traffic

Engineering, and Dayton Police and regional partners

Performance Measure: A written resolution is developed, approved and

implemented.

Timeline: Spring 2010 Resources: Staff Time

Oldentify an on-street arterial bicycle network and incorporate into the Bicycle Transportation Plan and other appropriate plans. The network shall include routes on the street grid to allow bypassing the regional trails following the river corridors, which are subject to closure from flooding and roadwork.

Details: Conduct a public input process to identify an arterial bicycle network and incorporate into the Bicycle Transportation Plan and other appropriate plans, including the comprehensive plan.

Responsible Party: Metropolitan Planning Organization (MPO) with input from Traffic Engineering and Engineering.

Performance Measure: A timeline and path/route hierarchy are developed and implemented. Funding is set aside in the city budget. Neighborhood plans reflect the arterial path system.

Timeline: Summer 2010

Resources: Staff Time and Street Department to Sign Routes

O Develop a public 5-year Bicycle Improvement Program (BIP) to manage selection, funding, and construction of bicycle facilities

Details: In order to encourage public participation, and in order to best take advantage of available opportunities, the city should develop a project selection process for new paths, new bridges, parking, on-street facilities, reconstruction, rehabilitation, resurface, repair and retrofit projects. This process would mirror a similar process for automobile facilities called the Transportation Improvement Program (TIP). Project selection should include consideration of destinations such as schools, colleges, shopping centers, and other trip generators. Included in project selection should be periodic review and upgrades to existing facilities. The BIP should be written by city staff. A public input process should be part of BIP development.

Responsible Party: Traffic Engineering will propose with input from Engineering, Planning, Parks, MVRPC and Dayton Cycling Taskforce Performance Measure: A written policy is developed, implemented, and updated on a regular basis.

Timeline: Fall 2010 Resources: Staff Time

Construct Bike Boxes at select and appropriate signalized intersections.

Details: A Bike Box is an advance stop bar for bicycles. It provides a safe area

for bicyclists to wait at traffic controls/signals that allows them to get an advance start on motor vehicle traffic, which stages at a stop bar behind the bicyclist. Often, the pavement within a Bike Box is painted. Potential locations include Washington Street at Jefferson and Washington Street at Ludlow and Washington at Main Street.

Responsible Party: Engineering and Traffic Engineering

Performance Measure: Bike boxes installed

Timeline: 2011

Resources: Staff time and pavement marking materials

Study and determine a location for two to three bike boulevards. Construct one and evaluate.

Details : A bicycle boulevard is a corridor where bicycles have preferential status. Only local motorized traffic is allowed

(for instance, to residences). A combination of signs and traffic calming devices are used to limit automobile traffic. Typically, a bicycle boulevard would have few traffic signals or signs causing the bicyclists to have to stop. Bicycles are thus provided a long linear stretch for quick and efficient travel. Bicycle boulevards tend to work best on grid street systems, where alternative parallel routes exist for motorized traffic. Examples include Second and Fourth Streets andBrown Street. If successful, expand.

New neighborhood plans should consider bicycle boulevards as part of their comprehensive transportation plan. Neighborhood plans in undeveloped areas should be amended or include bicycle boulevards to improve bicycling connectivity and access.

Responsible Party: Planning and Traffic Engineering

Performance Measure: Potential locations are proposed and one bike boulevard is built

Timeline: 2011

Resources: Staff time and construction costs.

O Author, update, improve, and implement a written street, path, bridge and bicycle parking maintenance policy.

Details: The policy should include two distinct parts.

A. General or Routine: Policy should include surface and joint repair, glass & debris pickup, frequency of service, and maintenance of bicycle racks and removal of abandoned bicycles and bicycle parts, maintenance of signs and markings, and trimming of trees.

B. Winter: Policy should include timeliness, level of service for bike lanes, paths, and select local street bike routes and snow removal at all public bicycle racks. The detail for plowing should be published in map format on the city's website so that the public knows what to expect for trip planning and requests for changes. There should also be a "one-stop" phone number for all city related issues that is published on the city web site (that would correspond to "report a problem" on the regional website) and

signed at select locations so that bicyclists may immediately report problems.

Responsible Party: Task Force

Performance Measure: A written policy is developed and implemented and

posted on website. Timeline: Fall 2010

Complete a public bicycle parking needs study for the central city area.

Details: May include need for covered parking, signing, rental bicycle lockers, on demand bicycle lockers, and/or a bike station (bike stations should be located in central employment areas). Investigate installation of a bicycle station and/or bicycle cages and/or electronic on-demand bicycle lockers. See examples of on demand lockers at: http://www/bikelink.org/

Responsible Party: Traffic Engineering and Planning with assistance from

Cycling organizations or outside consultant

Performance Measure: A parking study is completed

Timeline: 2011

Resources: Cost of study fundable through MVRPC

Olnstitute a program of city-provided public bicycle parking racks.

Details: The City would provide bicycle racks (usually a two bike rack such as a U rack, post, or ring) to be placed in the public right-of-way at the request of

businesses or citizens. Also consider using a limited number of on-street automobile parking spots as locations for public multi-bicycle racks. Best practices occur in Chicago, Seattle, and Milwaukee. Priority locations should include all public buildings.

Responsible Party: Traffic Engineering and Parking

Performance Measure: The city institutes a program and begins installing racks Timeline: Spring 2008

Resources: Staff time and the cost of racks and installation. An allocation for the purchase of the first portion of these racks in the city budget has been approved by the City Council.

OAccelerate development of bicycle routes, lanes, and paths.

Details: See Regional Plan, the Regional Transportation Plan

2020 and subsequent updates, and all other adopted plans.

Responsible Party: Mayor, Traffic Engineering, Engineering, Parks,

Metropolitan Planning Organization (MPO), Planning

Performance Measure: Accelerate progress towards fulfillment of recommended

facilities

Timeline: Ongoing

Resources: Depends on project. Will require a regular and increased commitment of local, state, and federal funding to bicycle projects.

Oconvert existing wide streets to two or three lane roads with bike lanes.

Details: Examples are all streets downtown within the Bike and Pedestrian

Friendly Zone identified elsewhere in this report.

Responsible Party: Traffic Engineering and Engineering

Performance Measure: Additional converted roads

Timeline: 2012

Resources: Depends on project Recommendations: Infrastructure

ODevelop, implement, and enforce a written bicycle access policy through and around public and private construction projects.

Details: Streets, Paths, bridges/tunnels and sidewalks should be included in the policy. Elements should include (but not be limited to) signage, detour routes, duration of detour, closures, etc. The same care and concern should be used for bicycles as for motor vehicles.

Responsible Party: Engineering, Traffic Engineering, Parks, Planning, Building Inspection

Performance Measure: A written policy is developed and implemented

Timeline: 2011

Resources: Staff Time

© Establish a Bike and Pedestrian Friendly Zone in the area defined by:

 South and East of the Great Miami River, North of US 35, and West of Keowee Street.

Details: Dedicated bike lanes or shared use paths on every street within the zone. Traffic signal timing and cross walk distances conducive to walking. Streets put on diets to reduce the number of driving lanes, Elements should include (but not be limited to) signage, detour routes,

duration of detour, closures, etc. The same care and concern should be used for bicycles as for motor vehicles.

Responsible Party: Engineering, Traffic Engineering, Parks, Planning, Building Inspection

Performance Measure: Completion of projections

Resources: Staff time and Federal TE and CMAC funding

- Target and complete key indicator-level infrastructure
  - Implement the two-way downtown bike lane project
  - Establish 3 bike parking facilities in core for up to 50 bikes through public/private partnerships.
  - Add sharrows or bike lanes to all core streets within the Zone by 2011
  - Work with regional partners to complete the South East Corridor Trail by 2010
  - Complete the Wolf Creek Recreation Trail in the City of Dayton by 2012
  - Complete the Creekside extension along US 35 into the Huffman Neighborhood by 2013

 Identify key neighborhood connections into Core and identify bike boulevards to establish 2013

Details: Identifying key elements that have the ability to quickly move the bike friendly effort forward is key to creating momentum and success that can be built upon.

Responsible Party: Engineering, Traffic Engineering, Planning, Task Force and

**Project Partners** 

Performance Measure: Completion of projections

Timeline: Various

Resources: Staff time and Federal TE, CMAC and Clean Ohio Trail Fund funding

Create a Bicycle Level of Service Analysis.

Details: Develop a tool that can be used for planning and designing on- and offstreet bicycle facilities. Elements may include path and bicycle lane widths. In order to evaluate paths, significant data must be collected.

Responsible Party: Engineering, Traffic Engineering, MPO Performance Measure: Analysis developed and completed.

Timeline: Fall 2010, in conjunction with update of Bicycle Plan

Resources: Staff time and/or consultant.

Complete a comprehensive review of physical barriers and missing links to biking routes.

Details: Collect information for use as a tool for making recommendations for the 6-year improvement program. These can be manmade barriers such as freeways, interchanges, incomplete street grid, "missing links," railroads and railroad crossing or natural barriers such as streams or steep topography Responsible Party: Engineering, Traffic Engineering, MPO Performance Measure: Tool developed and implemented Timeline: Fall 2010, in conjunction with update of Bicycle Plan

Resources: Staff time.

Ocreate a training, peer review, on-the-job training and mentoring program for bicycle facility concept, design and construction.

Details: Bicycle planning and engineering is often a skill learned on-the-job rather than in school. Dayton has a shortage of institutional knowledge, skill and experience in bicycle planning and engineering. Develop an training program that will develop thenext generation of engineers and planners who understand how to accommodate all modes of transportation.

Responsible Party: Engineering and Traffic Engineering, Planning, Police Performance Measure: Program developed and implemented

Timeline: 2011

Resources: Staff Time.

Revise the Standard Detail Drawings and construction standards to address several bicycle-related elements.

Details:

- A. Bicycle lane marking at signalized and unsignalized intersections.
- B. Path entering a street. Path entering a street design at a minimum should address smoothness of ride and turning movements.
- C. Path crossing a street at an elevated smooth level (speed table for motor vehicle). Path crossing a street design should also address the potential for motor vehicles stopping at the path.
- D. On-street left turn lanes for bicycles where a path crosses a street with a median to make the turn onto the path safer. Example locations for left turn lanes are Washington Street at Jefferson / Patterson intersection.
- E. Standardize arterial and collector street typical cross-sections
- F. Standardize pavement structure design process for paths to include maintenance vehicle usage.

Responsible Party: Engineering and Traffic Engineering

Performance Measure: Standard Detail Drawings and standards with policy are developed and implemented.

Timeline: 2013

Resources: Staff Time

Recommendations: Infrastructure

Accelerate elimination of sidewalk bike routes by providing convenient alternate routes and/or bike lanes.

Details: Bicycling on sidewalks can be dangerous because of conflicts with pedestrians and because automobiles may not expect a fast moving bicyclist to cross driveways or streets. Therefore, the committee recommends that no new sidewalk bike routes be created and that existing routes be moved off of sidewalks.

Responsible Party: Engineering and Traffic Engineering

Performance Measure: No new sidewalk bike routes are created and existing routes are moved off sidewalk

Timeline: Ongoing

Resources: Cost will vary by project.

Allow two-way bicycle operation on short one-way streets.

Details: Example is Stewart Street from UD to the river and Wolf Creek Trail

adjacent to James McGee

Responsible Party: Traffic Engineering

Performance Measure: Two-way bicycle operation is allowed on select short one way streets.

Timeline: Complete one in Fall 2011 and review; if feasible, three more by 2010

Resources: Staff time and signage

Identify, formalize, and improve known bike "shortcuts."

Details: Examples occur through the UD campus in several locations, near

Dayton Daily News HQ from Far Hills to Patterson, etc.

Responsible Party: Engineering and Traffic Engineering

Performance Measure: Shortcuts formalized and signed, if needed.

Timeline: Complete one in Fall 2010.

Resources: Cost will vary by shortcut. These should be relatively low cost projects.

#### **Examples of Destination Based Bike Network Signs Image: Image insert**

Oconvert current bike trail network and signage to a destination-based network.

Details: Signs will indicate where bicyclist can get to and the distance. Examples exist in Chicago and Portland. May include the naming of

some routes and the signage may be phased in.

Responsible Party: Traffic Engineering

Performance Measure: Network planned and signs installed

Timeline: Plans to begin no later than Spring 2010.

Resources: Detailed cost analysis required.

Ensure traffic signals actuate to bicycles and allow sufficient time for a bicyclist to cross the street with the signal.

Details: Inventory all existing street signals to ensure that they actuate to bicycles and are timed to allow sufficient time for a bicyclist to cross the street with the signal. Take corrective action as needed.

Responsible Party: Traffic Engineering

Performance Measure: All street signals actuate to bicycles and are properly

timed

Timeline: Spring 2010

Resources: Staff time and cost of implementation materials.

Consider bicycle signals (has bike symbol) at appropriate signal locations

where bikes may have a different movement than a motor vehicle.

Details: E.g. All downtown Main St and Patterson Crossings

Responsible Party: Traffic Engineering

Performance Measure: Special cases are reviewed and signal changes

considered

Timeline: Spring 2011

Resources: Staff time and cost of implementation materials.

Develop policy to mark bike lanes at signalized intersections on bike routes (and other streets where bikes are expected) even if the street does not have bike lanes.

Details: Third and Main, Fifth and Keowe, etc

Responsible Party: Traffic Engineering

Performance Measure: Policy developed and implemented

Timeline: Spring 2011

Resources: Staff time and cost of marking lanes

Where a sidepath crosses an intersecting street with a stop sign or yield sign, place a supplemental sign indicating two-way bicycle traffic.

Details: Stewart St with intersection of Great Miami River Trail. Best practice

examples in Denmark.

Responsible Party: Traffic Engineering

Performance Measure: Supplemental signs placed

Timeline: Spring 2011

Resources: Staff time and cost of sign implementation

Install bicycle actuation for signals and pedestrian countdown signals at

signalized path crossings (where appropriate).

Details: Existing actuation example is Stewart Street at Patterson

Existing countdown example is the. Responsible Party: Traffic Engineering

Performance Measure: Policy developed and implemented

Timeline: Spring 2011

Resources: Staff time and cost of new traffic signal components.

Adjust signal timing/progression on significant bike routes to better favor bicycle commuters.

Details: Starting and stopping at signals is a significant inconvenience to bicyclists and discourages some from bicycling. Favoring bicyclists on certain significant routes can encourage

more bicycling and improve safety. Responsible Party: Traffic Engineering

Performance Measure: Signal timing is adjusted

Timeline: Spring 2011 Resources: Staff time

Recommendations: Infrastructure

#### Wayfinding signs. Image insert

O Adopt the current network of wayfinding signs and maps on the trail system and for use at key locations on the street system.

Details: In 2007, Miami Conservancy District initiated a regional trail sign system through ODOT and regional partners. This trail wayfinding system is now the standard in Montgomery, Miami, and Greene Counties and should be adapted and modified for on-street bicycle system wayfinding.

Responsible Party: Graffiti Team, Traffic Engineering, and Parks with assistance from Bicycle Federation of Ohio and private partner.

Performance Measure: Existing signs are repaired and new signs added Timeline: Winter 2009

Resources: Staff Time and signage design and production costs. Federal

Transportation funds.

Revise, Implement and enforce the existing bicycle parking ordinance.

Details: A revised ordinance should include the following provisions:

- 1. Access and Placement
- 2. Parking Standards: a. Bike Racks: Provision for an approved list of bicycle racks for private development and public spaces to include a properly worded appeals process. b. Bike Lockers c. Internal Storage
- 3. New Development:
- a. Public Buildings: Employee and visitor parking
- b. Private Businesses: Employee parking, lockers and customer parking
- c. Residential: Resident long term indoor parking and resident short term indoor and outdoor parking and visitor parking
- d. Mixed Use Development: Residential, Employee, and Customer
- 4. Retrofitting Existing Development: a. When making a major change to development, they will have to come into compliance for bicycle parking requirements for the entire development b. A timeline should be developed for existing development to come into compliance with the bicycle parking ordinance.
- 5. Enforcement of the bicycling parking ordinance should include counting spaces, verifying that the rack supports the bike frame and can be used with U-shaped lock, etc. Bike parking design and placement should not be the last task a developer undertakes because this results in the racks being placed in empty areas that do not easily support automobile parking, like near the garbage bins far away from the building entrance. Ideally, the rack placement should be a condition for zoning code compliance approval. Ordinance example: Association of Pedestrian & Bike Professionals Bicycle Guidelines.

Responsible Party: Planning, Zoning, Traffic Engineering

Performance Measure: An improved ordinance is written and implemented

Timeline: Winter 2009 Resources: Staff time

Conduct a review of complex intersections and determine solutions to improve bicycle/pedestrian safety and comfort.

Details: Review intersections and determine solutions (examples include

Patterson / Main; Washington – Main - Patterson

Responsible Party: Traffic Engineering

Performance Measure: Intersections are reviewed and a plan for improvements made.

Timeline: Spring 2011

Resources: Staff time and cost of corrective action.

Increase bicycle capacity on RTA buses.

Details: Most Dayton buses currently have 2 bike racks mounted on the front of the buses. As these racks require replacement or new buses are purchased, the racks should be replaced with 3 bicycle racks.

Responsible Party: RTA

Performance Measure: Capacity is increased

Timeline: Ongoing

Resources: Cost of racks

#### Insert Image Bike Rack on RTA bus:

Incorporate bike access and bike transport in/on all streetcars, and commuter rail planning and construction, and remain mindful of impact of tracks on bicyclists.

Details: In all development of new transit options, including streetcars and/or commuter rail, provide convenient bicycle transport. If and when the City moves forward with plans for streetcars or commuter rail, consideration should be made to the possible negative effects of rail tracks (parallel and perpendicular to the travel lane) on bicyclists. Cities like Portland and Amsterdam present useful real world examples of negotiating these difficulties

Responsible Party: Transport Committee, RTA, MVRPC

Performance Measure: Bicycles are considered and accommodated for in rail

projects

Timeline: 2010

Resources: Staff and committee time

Bicycle parking should be provided at all city buildings and transit centers. Details: Covered short-term parking and secure long-term parking should be provided at all current and future transit transfer points, future rail and bus stations, and park and ride lots. Secure, long term bicycle parking should be installed at these locations.

Example might include rented or pay-by hour bicycle lockers. Parking should also be provided at major bus hubs. In

addition, the city will install racks to meet the zoning ordinance and will assure that all city buildings, libraries and parks and recreation centers have bicycle parking.

Responsible Party: Mayor's Office, RTA, Library Board, and Parks and RC,

**FRMP** 

Performance Measure: Bicycle parking is provided

Timeline: Ongoing

Resources: Staff time and cost of racks

# Land Use and Planning

Create a city interdepartmental staff team to meet at least monthly to improve communication and joint planning for future bicycle facilities.

Details: Many City departments are involved in some aspect of bicycle facility planning and implementation. Staff from these departments often work together informally on an ad hoc basis, but the recommendations or actions of one group are not always communicated effectively to all other staff who should be aware of this information, or who can help advance the recommendation toward adoption

and implementation. A formal staff team with representatives from the agencies most involved in bicycle facility planning (including Engineering, Traffic Engineering, Metropolitan Planning Organization, Planning and Parks) will facilitate better inter-agency communication and mutual support in implementing bicycle facility recommendations.

Responsible Party: All departments

Performance Measure: Group meets quarterly.

Timeline: Ongoing beginning in 2008

Resources: Staff Time.

Include specific recommended bicycle connections to major activity centers in neighborhood plans.

Details: Neighborhood plans should include specific recommended bicycle connections to major activity centers within the neighborhood, such as employment areas, business districts, parks, schools and other civic uses, adjacent

neighborhoods, and city-wide and regional bicycle transportation routes and facilities.

These plans should recognize a hierarchy of bicycle facilities that may include off-street bicycle paths and trails, marked on-street bicycle lanes, and identified routes to major neighborhood destinations using low-volume local streets, which may or may not be officially designated, that can provide an alternative for younger or less-experienced bicyclists who are not comfortable using the bicycle lanes provided on collector and arterial streets.

For new neighborhoods at the urban edge, the recommended bicycle facilities should be shown on the neighborhood development plans that are adopted before

development begins. For older, established neighborhoods, additional bicycle connections should be incorporated into the neighborhood plans or special area plans that are prepared for some of these areas from time-to-time, and/or be recommended in bicycle facility plans to address network deficiencies.

Responsible Party: Planning

Performance Measure: Specific recommended bicycle connections to major activity centers are included in neighborhood plans

Timeline: 2011

Resources: Staff Time.

Review and strengthen the zoning ordinance to ensure adequate on-site pedestrian and bicycle access, parking, and circulation.

Details: Review and strengthen the zoning ordinance to ensure that new developments provide adequate on-site pedestrian and bicycle access, parking, and circulation, including connections to existing and planned bicycle facilities/bikeway systems.

Responsible Party: Planning, Engineering, and MVRPC

Performance Measure: Ordinance is reviewed and strengthened to ensure adequate on-site pedestrian and bicycle access, parking, and circulation

Timeline: 2010

Resources: Staff Time

Review and strengthen the subdivision ordinance to ensure a connected street network with bicycle facilities

Details: Review and strengthen the subdivision ordinance, as needed, to ensure that new developments provide a connected street network with multiple route options and destinations and incorporate bicycle facilities shown in applicable land use and transportation plans.

Considerations may include required maximum block lengths, width of mid-block connections, reservation of right-of-way for shared-use paths, and possible requirement for installation of local shared-use paths primarily serving residents within the neighborhood (e.g., connections between cul-de-sacs and shortcuts through parks or other open spaces) and reduced speed limits.

Responsible Party: Planning

Performance Measure: Subdivision ordinance is strengthened to ensure a connected street network with bicycle facilities

Timeline: 2012

Resources: Staff Time.

O Annual bicycle counts are taken on major bicycle routes and bicycle/pedestrian counts on bike paths.

Details: Locations are selected and counts are taken annually

Responsible Party: Traffic Engineering, Planning, Engineering, and MVRPC and Regional Partners

Performance Measure: Locations are selected and counts are taken annually

Timeline: Ongoing beginning in 2009

Resources: Staff Time

Obevelop a map of urban to rural routes and a written policy for their future preservation and rehabilitation.

Details: Due to development and traffic pressures, many roads from the city leading out into rural areas that were once desirable for bicycling are becoming unpleasant and/or dangerous on which to bicycle. If the currently designated bicycle route cannot be preserved in a manner appropriate for most intermediate bicyclists, a new, equally convenient route nearby shall be designated through the

use of bicycle boulevards, paths, connections to existing low-volume streets, or other such infrastructure.

Responsible Party: Regional Bike Steering Committee, MVRPC Performance Measure: A map and written policy are developed and

implemented

Timeline: Winter 2010 Resources: Staff Time

Develop sources of funding for shared use paths that serve larger areas. Details: Sources of funding could include impact fees. Impact fees are designed to ensure new development pays a proportionate share of new, expanded, or

improved facilities required by the development. Impact fees have been used for roadway improvements, including intersection improvements and traffic signals.

Bicycle facilities are also needed to serve new development.

Responsible Party: All departments and Mayor's office

Performance Measure: Impact Fees or other funding sources are developed.

Timeline: 2011

Resources: Staff Time.

Maintain bicycle connections as the street network develops and is modified. Details: As the street network in a developing neighborhood evolves, the ability to provide all of the recommended bicycle connections must be maintained and any revised alignments for these routes should be clearly shown on the revised plans.

Land in new neighborhoods is often developed over a relatively long time period, often in disconnected tracts. This makes the alternative local street connections, which are preferred for bicycling by children and less-experienced adult bicyclists, particularly vulnerable to being broken inadvertently as multiple iterative modifications are made to the street network that was envisioned in the plan as originally adopted. This reinforces the importance of clearly including all of the recommended bicycle connections in the neighborhood plans and ensuring that the plans remain current.

Responsible Party: Planning, Traffic Engineering, and Engineering Performance Measure: Bicycle connections are maintained as the street network develops.

Timeline: Ongoing beginning in Spring 2008

Resources: Staff Time.

## Enforcement

Create a formal bicycle program, with an identified program coordinator, within the Dayton Police Department to standardize police bicycle operations and to increase the degree to which bicycles are used as a mode of transport by police personnel for general enforcement as well as for bicycle /pedestrian enforcement.

Details: The purpose for doing so is to increase the degree to which bicycles are used as a mode of transport by police personnel for general enforcement as well as for bicycle /pedestrian enforcement, and to increase the degree to which Dayton Police Department serves as a visible role model to the community.

Responsible Party: Police

Performance Measure: Program created

Timeline: 2013

Resources: Depends on size of program

Review all bicycle related ordinances and laws for relevancy to being bike friendly. Bike task force to develop set of detail ordnance changes and recommendations to support bike friendly initiative.

Details: The purpose for doing so is to increase the degree to which bicycles are

used as a mode of transport to ensure general enforcement is in line with bike friendly strategy

Responsible Party: Dayton Police and Task Force

Performance Measure: Review and recommendations made

Timeline: 2009

Resources: Depends on size of program

Increase the number of police personnel available to be assigned to traffic law enforcement to allow for consistent enforcement.

Details: This will enable the Dayton Police Department to increase the amount of time spent on bicycle and pedestrian enforcement efforts, and to conduct such enforcement during a wider variety of hours.

- a. The Dayton Police Department should continue the existing practice of urging existing personnel to conduct more traffic law enforcement as their duties permit.
- b. Dayton Police Department should continue to prioritize enforcement of hazardous moving violations, and should continue the practice of prioritizing those efforts to areas or situations where safety hazards are most prevalent.

Issues regarding consistent enforcement

- 1. All traffic law enforcement serves to increase bicyclist safety by improving driving behaviors of motorists and bicyclists. If drivers are observing speed limits, stopping at stop signs and signals, yielding right of way as required by law, driving sober, etc., then the streets are safer for everyone.
- 2. In particular, law enforcement should be aware that speeding significantly increases severity of auto-bicycle and auto-pedestrian crashes, and failure to yield is one of the most common forms of auto/bicycle crashes for adult cyclists in urban areas.
- 3. Parking law enforcement is needed to prevent parking in bicycle lanes. Responsible Party: Police and Mayor's Office

Performance Measure: More personnel available for traffic enforcement

Timeline: Winter 2010

Resources: Shifting duties of existing staff or adding staff

Deferring prosecution for cited bicyclists who

successfully complete bicycle traffic safety classes.

Details: Bicyclists who are cited are currently able to attend a class to defer prosecution

Responsible Party: Police and Traffic Engineering, certified training instructors.

Performance Measure: Continue program of bicycle education

Timeline: Ongoing

Resources: Same as current

Improve use of media in covering crashes.

Details: Reinforce desired traffic safety messages, dispel cultural myth that crashes are "accidents", that bicycling is dangerous, and blaming the cyclist by

inference. Encourage the use of word "crash" en lieu of "accident" to reinforce this message.

Responsible Party: All departments, particularly police

Performance Measure: Media coverage of bicycle crashes improves

Timeline: Ongoing Resources: Staff time

Develop a Bicycle Crash Report "study sheet" so officers reporting bicycle rashes include necessary information for crash analysis.

Details: This is needed for development of engineering, safety education and for enforcement programs.

- 1. City Traffic Engineering should continue to analyze bicycle crash data to determine bicycle safety improvement goals; to determine causal factors leading to such crashes; and to identify locations where such crashes commonly occur.
- 2. Traffic Engineering will communicate this information to Dayton Police Department to enable them to develop traffic law enforcement plans that are responsive to these identified safety problems.
- 3. Traffic Engineering will work with state government to change the crash reporting requirements, to require reporting of crashes involving bicycles or pedestrians that do not involve motor vehicles (Current state law does not require such reporting).
- i. Recommended criteria crash involves injury or property damage of \$200 or more.

Responsible Party: Police and Traffic Engineering

Performance Measure: Study sheet developed and implemented

Timeline: 2011

Resources: Staff time and minimal printing

Dayton Police Department continue to work with UD Campus Police, Sinclair Security, Five Rivers MetroParks Rangers, and Montgomery County Sheriff to ensure consistency in cycling enforcement efforts.

Details: In order to assure that all jurisdictions are communicating their plans and programs, as well as sharing best practice information, regular coordination should take place. Consistent enforcement is a cornerstone of encouraging lawful

and safe behavior.

Responsible Party: Police

Performance Measure: Ongoing good relations and partnerships

Timeline: Ongoing Resources: Staff time

Continue to educate and train law enforcement personnel in the enforcement of laws concerning bicyclists' rights and responsibilities

Details: Use the Ohio Department of Transportation – Bureau of

Transportation Safety (DOT-BOTS) Pedestrian and Bicycle Law Enforcement

training course, new recruit training, and roll call refresher courses. The DOT-BOTS training should be offered at least once per year and one or more officers should be trained to provide these courses internally. (Train-the-Trainer)

Responsible Party: Police

Performance Measure: Annual trainings

Timeline: Ongoing

Resources: Staff time and cost of trainings, which may be covered by Ohio

Department of Transportation – Bureau of Transportation Safety

Recommendations: Assessment and Review

# Education, Encouragement, and Outreach

Institute a Sunday traffic free downtown ride once per month.

Details: Sunday *Parkways* are times set aside on weekends and holidays for traffic-free biking and walking on a network of selected streets. In effect, streets are transformed into trails. Hundreds of thousands of cyclists use Sunday Parkways called Ciclovia in Bogotá, Columbia, and Via RecreActiva in Guadalajara, Mexico. Sunday Parkways do not impact motorized traffic flow like other special events, since all cross-traffic flows normally. Participants stop at all traffic signals, so that only the closed street is affected. Often on a divided arterial, the Sunday Parkway uses one half of the roadway and motorized traffic uses the other half. Sunday Parkways provide close-to-home recreational opportunities for all ages and all types of active travel.

Responsible Party: Mayor's Office, Traffic Engineering, Police, Dayton Metro Performance Measure: A Sunday Parkways program is launched, expanded, and sustained

Timeline: Spring 2008

Resources: Staff, police time, and volunteers

O Institute a Moonlight Ramble ride on Urban Nights dates

Details: Encourage cycling by instituting a mass nighttime ride through downtown and various neighborhood. This ride will put people who are rarely on the street downtown in area thought to be dangerous and will create an new understanding of the relative safety of both cycling and downtown.

Responsible Party: Mayor's Office, Traffic Engineering, Police, Dayton RTA Performance Measure: A Moonlight Ramble ride is launched, expanded, and sustained

Timeline: Spring 2010 (Urban Nights)

Resources: Staff, police time, and volunteers

O Create a Safe Routes to School plan for Dayton.

Details: To include education, enforcement, engineering, encouragement, and evaluation for children K-12.

Responsible Party: Planning, Traffic Engineering, Health, Engineering will work together with the Dayton City School District (MMSD), other school districts

that serve City of Dayton children, Safe Community Coalition, Ohio Bicycle Federation, and other community groups.

Performance Measure: Plan completed

Timeline: Ongoing and funded for 5 schools ld core schools by end 2010

Resources: Staff time or cost of a consultant

Maintain and expand partnership in the Drive Less, Live More campaign Details: This cost-effective marketing program identifies people receptive to changing the way they travel and then provides them with personalized information about their preferred option(s).

Responsible Party: DLLM Partners Mayor's Office, Public Health, MPO, Metro,

Traffic Engineering

Performance Measure: The DLLM marketing campaign is expanded

Timeline: Winter 2009-2010

Resources: Depends on extent of program Recommendations: Assessment and Review

OIntegrate bicycling into GetUp! Montgomery County program

Details: GetUp! Montgomery County and The Natural Step are existing efforts

that can and should integrate bicycling into their programs.

Responsible Party: Public Health

Performance Measure: Bicycling content of GetUP! Montgomery County

Timeline: 2009

Resources: Staff Time

Facilitate an annual meeting of all regional bicycle/pedestrian planners/engineers in MVRPC region at Planning Workshop.

Details: In order to assure that all communities and organizations are communicating their plans and programs, as well as sharing best practice information, an annual meeting should be held.

Responsible Party: Staff from all departments with MVRPC and Planning

Workshop as lead

Performance Measure: An annual meeting is held

Timeline: Dec 2009 at Planning Workshop

Resources: Staff time and nominal meeting costs

Undertake a scientific survey to determine the level of bicycling in Dayton and what the public feels can and should be done to improve bicycling conditions and to increase the number of people bicycling.

Details: In addition to the fact that reliable figures are not available for the number of people bicycling in Dayton, the Greater Dayton Planing Group recognizes that

there are issues that they do not have the answers for regarding bicycling. Among

these issues is the question of how to get those who do not currently bicycle to try it. The Committee hopes that some innovative solutions will emerge through the recommended mini-grant program, this scientific study, and the

individualized marketing program. The city may be able to partner with the UD or WSU to complete the survey.

Responsible Party: Traffic Engineering and/or Public Health Performance Measure: A survey is implemented and analyzed

Timeline: Spring 2011

Resources: Staff time and the cost of the study Recommendations: Assessment and Review

Create a plan for city bicycle education, encouragement, and outreach for adults.

Details: Create a plan and consider adding a bike coordinator to address adult bicycle education and outreach to be housed in the Public Health Department, Planning or

Five Rivers MetroParks Outdoor Recreation Dept..

Responsible Party: Mayor's Office, MetroParks: A plan for adult bicycle education and outreach iscreated and implemented and appropriate staff or consultant is hired

Timeline: Winter 2010

Resources: Estimated cost \$100,000 annually for additional staff person/contract Expand and Improve children's bicycle safety education in school.

Details: In collaboration with the educational plan/staff recommended, expand and improve bicycle education for children. May include Safe Routes training, Bike Clubs, training associated with free helmet giveaways, rodeos with trained instructors. Ideally, every child in grades 5 or 6 (age 9-12 would be ideal) will receive detailed bicycle safely training. Possible housed in conjunction with youth program, earn a bike and Co-op.

Responsible Party: Traffic Engineering, and other community groups, as well as collaboration with Dayton Metropolitan School District and other school districts serving Dayton school children..

Performance Measure: Children receive bicycle safety education

Timeline: 2011

Resources: Depends on level of program implemented

Support a School District policy that all children, if allowed by their parents, should be allowed to bicycle to school in Dayton.

Details: Encouraging bicycling begins at a young age. With parental guidance, bicycling can be an excellent form of transportation for children to get to school. The city should support adult supervised and/or approved (depending on age) bicycling of children to school.

Responsible Party: Mayor's office and Planning will work with Dayton City School District (MMSD) other school districts that serve City of Dayton children, Safe Community Coalition, Ohio Bicycle Federation, and other community groups.

Performance Measure: All children are allowed to bike to school (with parental

approval)

Timeline: Fall 2009 Resources: Staff time Provide information and incentives to all city employees about bicycling for transportation/recreation and encourage other businesses and corporations to do so as well.

Details: may include League of American Bicyclists classes, other classes, printed materials, prizes

Responsible Party: Mayor's Office, Traffic Engineering, Public Health with help from Ohio Bicycle Federation and other community groups

Performance Measure: Information and incentives are made available to all City employees

Timeline: Spring 2008 and ongoing Resources: Depends on program

Establish Bicycle User Groups (BUGs).

Details: Bicycle User Groups (BUGs) are worksite or neighborhood-based groups involved in various cycling activities. Some BUGs organize rides or events, while others campaign for better cycling facilities.

Responsible Party: Traffic Engineering, Parks, Public Health, Bicycle

Federation, priority boards or other community groups

Performance Measure: When the city has opportunities to do so, they will direct

citizens to appropriate resources

Timeline: Fall 2011 Resources: Staff time

Encourage regular bike programs/workshops at around the community Details: The task force recognizes that there are issues that they do not have the answers for regarding encouraging more people to bicycle. The task force does not have an articulated concept for how to reach out to these groups, however they acknowledge that the issues addressed in this report affect all citizens of Dayton, and that a better community can be developed through open communication and collaboration.

Responsible Party: Parks and Rec, Public Health, GetUp! Montgomery County, Five Rivers MetroParks, Drive Less, Live More Campaign, priority boards. Performance Measure: When the City has opportunities to do so, they will provide assistance to groups that wish to facilitate bike programs.

Timeline: Ongoing Resources: Staff time

Reach out to neighborhood planning councils, developers, builder's association, environmental groups, chamber of commerce, schools.

Details: The Greater Dayton Planing Group recognizes that there are issues that they do not

have the answers for regarding encouraging more people to bicycle. The Committee does not have an articulated concept for how to reach out to these groups, however they acknowledge that the issues addressed in this report affect all citizens of Dayton, and that a better community can be developed through open communication and collaboration.

Responsible Party: All departments

Performance Measure: Ongoing good relations and partnerships with these

groups

Timeline: Ongoing Resources: Staff time

Establish a mini-grant program to support community efforts that encourage bicycling.

Details: The mini-grant program taps the creative potential of our community by seeking ideas from the public to encourage bicycling. The grants will particularly seek to reach people who either do not bike at all or who bicycle infrequently, as well as minority, low-income, and other under-represented populations. May include grants for public art that is dedicated to bicycling or bike parking for businesses.

Responsible Party: Task Force, Mayor's Office

Performance Measure: Mini grants given away and associated projects

completed

Timeline: Launch early 2010

Resources: Funding to come initially from the corporate sponsorships of the

Task force. If successful, seek additional funding from the city or

businesses

#### **Insert Image A family bicycles**

 Establish a regional cycling promotions effort among regional agencies and metropolitan governments

Details: Consider advertising website with stickers on city bike racks, cross-linking, joint cycling promotions

Responsible Party: Regional agencies

Performance Measure: A web clearinghouse is developed and launched with

improved web sites and a jiont 2010 cycling promotion is developed

Timeline: ongoing Fall 2009

Resources: Staff time and TBD funding from all agencies

Develop an online interactive bicycle route mapping to include segment suitability and average biking time as part of above web site.

Details: Web-based application similar to Mapquest for cars. Investigate the development of a "bike score" to assist bicyclists, businesses, and property sellers/buyers of the bicycle—friendliness of an area.

Responsible Party: Traffic Engineering and Engineering with assistance from Bicycle Federation of Ohio or other contractor

Performance Measure: Online application developed and launched

Timeline: Winter 2011

Resources: Development and web hosting costs. Recommendations: Assessment and Review

Add Montgomery and Miami County to Green County Cycling Classic Details: Separate from Bike to Work Week—and held during summer months.

Likely location would be Riverscape MetroPark site when completed

Responsible Party: seek a nonprofit or private company Performance Measure: A festival is developed and held

Timeline: Summer 2011-12

Resources: Minimal city resources; festival should be organized and supported

by private sector

Reach out to minority, low-income, and under-represented groups.

Details: The Plan recognizes that there are issues that they do not have the answers for regarding bicycling. Amongst these issues is the question of

how to encourage minority, low-income, and other under-represented groups to bicycle more. The Committee hopes that some innovative solutions will emerge through the recommended mini-grant program, the scientific study, and the individualized marketing program. In addition, other approaches may include materials printed in foreign languages, Major Taylor programs (for African-American children), Affordable Transportation for Affordable Housing programs, Getup! Montgomery County, and reaching out to churches/neighborhood centers.

Responsible Party: All departments and regional agencies, DLLM

Performance Measure: Improved outreach to these groups

Timeline: Ongoing Resources: Staff time

Recommendations: Assessment and Review

Promote programs that make bicycles available to everyone regardless of income level (both used and new bikes) thru *earn a bike* and integrated Coop Program

Details: Examples of such programs include Red Bike Program, Wheels for Winners, Boys and Girls Club, GetUp!, , UD Brown St, and Adventure Central, DECA, Teens in Actions, etc.

Responsible Party: establish non-profit

Performance Measure: When the City has opportunities to do so, they will

direct citizens to these resources

Timeline: 2011
Resources: Staff time

Coordinate bicycle plans and activities with the University of Dayton and Wright State, Sinclair

Details: In order to ensure that all communities and organizations are communicating their plans and programs, as well as sharing best practice information, regular coordination should take place.

Responsible Party: All departments

Performance Measure: Ongoing good relations and partnerships with

colleges/universities Timeline: Ongoing Resources: Staff time

Recommendations: Assessment and Review

Promote existing rides, events, programs, and groups that promote bicycling.

Details: Examples include Bike to Work Week, MoMBA, Club Rides, Fundraising Events, Competitive Sporting Events, Mountain Biking Responsible Party: Regional Promotion project, regional agencies, DLLM Performance Measure: When the City has opportunities to do so, they will

direct citizens to these resources

Timeline: Ongoing Resources: Staff time

Provide printed safe bicycling information to bicycle event planners and participants through city parks permitting process.

Details: Bicycling events provide a unique opportunity to educate cyclists because they are gathered in one place. By educating bicyclists on the rules of the

road and on courteous riding behavior, the city can improve safety and the relationship between bicyclists and motorists.

Responsible Party: MVRPC and regional agencies

Performance Measure: Information provided to all events

Timeline: Spring 2009

Resources: Bicycle Federation of Ohio may be willing to assist with cost and distribution. 10,000 newsprint publications can be printed for about \$500

Create a Bicycle Ambassador program.

Details: The concept of bicycle ambassadors is gaining popularity nationwide. Bicycle Ambassadors work to encourage bicycling as a form of transportation, while promoting safety. Ambassadors might organize a number of activities such as: bike skill and safety clinics, free bike repair and commuter classes, share maps

and offer route - finding help, lead "Get to Know Dayton by Bike" tours, helmet fittings, ABC Quick Bike Checks, Bike Rodeo assistance, co-host special events by request. The Ambassadors would interact with people every day on Dayton's streets - answering questions, giving out free safety gear and resources, offering courses to help people become better cyclists, demonstrating the best biking and walking techniques, speaking with motorists and moped drivers about bike and pedestrian issues and more. Currently, the University of Ohio has a campus Ambassador program

Responsible Party: Mayor's Office, regional agencies, FRMP MVPs, Public Health, Police, or Parks

Performance Measure: A Bicycle Ambassador program is launched and sustained

Timeline: Spring 2010

Resources: Cost proportional to size of program. Estimate \$25,000-\$50,000 per

1/2 time Ambassador

Coordinate bicycle plans and activities with public and private K-12 schools Details: In order to ensure that all communities and organizations are communicating their plans and programs, as well as sharing best practice information, regular coordination should take place.

Responsible Party: All departments

Performance Measure: Ongoing good relations and partnerships with schools

Timeline: Ongoing Resources: Staff time

Recommendations: Assessment and Review

Investigate implementation of a bike sharing program

Details: Many communities throughout the world are using bike sharing programs or short-term, on-demand bike rentals to encourage bicycling. Dayton had a brief bike sharing program called "red bikes" in the 1990s. Currently, the University of Dayton and Active Lifestyle Committee is researching a bike sharing program. The city should work with the university to investigate expanding such a program citywide.

Responsible Party: Plan committees and task force

Performance Measure: Implementation of a bike sharing program

Timeline: Winter 2011 Resources: Not known

Recommendations: Assessment and Review

# Assessment and Review

Adopt/accept this report through the City process.

Details: The recommendations of this report will be considered on an even basis with recommendations for other modes. This report will be integrated into other transportation plans.

Responsible Party: Mayor and Council

Performance Measure: The report is adopted

Timeline: 2009 Resources: No cost

The Mayor and city department heads work as a team to be catalysts for

implementing the recommendations of this report.

Details: It is anticipated that this report will be officially adopted through the usual city policy process via resolution by the Mayor. Implementing the recommendations of this report will require a cultural change in the way that the government process currently operates. Jump-starting that change will take a fair measure of political will. The Mayor will designate a staff person in her/his office

be the point person to monitor the progress of report implementation.

Responsible Party: Mayor and city department heads

Performance Measure: A call to action is made

Timeline: Ongoing Resources: No cost

Recommendations: Assessment and Review

Staff from the Mayor's office will meet annually with bicycle advocacy groups.

Details: Groups may include

- a. Ohio Bicycle Federation, Miami Valley Mountain Bike Association or other grassroots cycling organizations.
- c. Cyclocross groups to discuss cyclocross in local parks,
- d. Local urban riders to discuss rideablity of downtown and growth of the urban riding culture
- e. Other interest groups

As appropriate, the Mayor's office will pass information from these meetings on to appropriate city staff for follow-up.

Responsible Party: Mayor's Office

Performance Measure: Meetings are held and plans to move forward with

interest groups are developed

Timeline: Fall 2009 Resources: Staff time

Recommendations: Assessment and Review

O Create an annual "Policy and Planning Bicycle Tune-Up Report Card" to be presented to the Board of Commissioners each year.

Details: The first report card would be due by May 2008. The report card would be available to the public so that citizen groups may monitor the city's progress on bicycling issues and the recommendations of this report. The report card will reference the themes and chapters of this report as a guide and report on the status of implementation, as well as update the recommendations. The report will be made by staff to the Task Force in conjunction with a public hearing and the Task Force will forward the report to the full city council and Mayor with their comments for adoption/acceptance.

Responsible Party: Staff from all departments with Planning, Traffic Engineering, and the MVRPC as leads.

Performance Measure: An annual report card is published and made available to the public

Timeline: Annually starting Spring 2010

Resources: Staff time

## Conclusions

All of the bike friendly cities (places like Boulder, Portland, Louisville, Copenhagen and Amsterdam) have become great cities for bicycling because of the visionary actions of citizens and government. The time is ripe for Dayton to become one of the best cities in America for bicycling. This report outlines how to

build upon the excellent work which has already been accomplished through the efforts in the public and private sectors over many years in order to move towards becoming a Bronze Level Bicycle Friendly Community by 2010 and ultimately a Platinum Level Bicycle Friendly Community by 2020. It is up to the citizens and leaders of Dayton to make it happen.

#### Resources

#### **Local Resources**

http://pedalopolis.com/ http://www.miamivalleytrails.org/

#### **Advocacy Organizations**

http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/

http://www.thunderheadalliance.org/site/index.php/site/index

http://www.bikesbelong.org/

http://www.adventurecycling.org/

http://www.ohiobike.org/

#### Cycling Organizations in other Cities

http://bike-pgh.org/

http://www.bikechattanooga.org/

http://bikeportland.org/

http://www.louisvilleky.gov/BikeLouisville/

http://www.clevelandbikes.org/Clevelandbikeplan.htm

http://bikecolumbus.blogspot.com/

http://cityofdavis.org/bicycles/

#### Bike Facilities - Equipment, Co-ops and Hubs

http://ohiocitycycles.org/

http://www.bikestation.com/

http://workingbikes.org/

http://www.sopobikes.org/index

http://www.apbp.org

http://www.bikeracks.com